

METHOD AND APPARATUS FOR ERROR DETECTION**Abstract of the Disclosure**

5 The present invention is an error detection and correction scheme that enables
the use of Horner's algorithm for the computation of EDC syndromes from the
computed error pattern. Specifically, "transformed" EDC syndromes are computed
during the read back of data and parity from the medium. The transformed
syndromes are values of the polynomial whose coefficients occur in reverse order
10 from that of the EDC codeword polynomial. In essence, by reversing the order of the
coefficients, the Chien search processes the terms in descending order which is the
right direction for Horner evaluation.